

EE434L-586L

Davinci Board (DM6437) for Video Project

In this document, we provide the description of a fixed-point DSK that will be available for video projects. DM6437 (a.k.a Davinci) board is desirable for video-related projects such as gesture recognition, object tracking, optical character recognition (OCR), and video games, etc.



Here are the pointers to the support webpage of the board, where you can download the documents and examples related to each of them

<http://c6000.spectrumdigital.com/evmdm6437/reve/>

The following table summarizes hardware specifications of DM6437.

	DM6437 (Davinci)
DSP	DM6437
DSP Frequency	600 Mhz
Internal Memory (Fast)	256 Kbytes
External Memory (Slow)	128 Mbytes DDR2 DRAM
Input video resolution	Interleaved 720 x 480.

Output video resolution	Interleaved 720 x 480.
Video input interface	RCA / S-video
Video output interface	RCA / S-video to external display

The DM6437 has a large freedom of interfacing with input/output video through S-video and RCA (either on LCD monitor or on projector). The resolution of input video sequences is higher but note that the effective number of pixels is $720 * 480 / 2$ because it is interleaved. Also, note that we have relatively small internal memory and less powerful DSP. Thus, if your algorithm requires high computational power and large memory, you need to optimize your algorithm to maximize your frame-rate.

If you want to check the details, please refer to the pointers:

http://c6000.spectrumdigital.com/evmdm6437/reve/files/EVMDM6437_TechRef.pdf